

**WHAT IS CLAIMED IS:**

1. A method of determining a period of recurring events within a recorded signal, the method comprising:

establishing one or more anchor points in the recorded signal, the anchor point being indicative of a beginning point for a period of recurring events in the recorded signal;

determining a length for the period of recurring events in the recorded signal, the length starting from the established anchor point and defining a first loop; and

refining the length for the period of recurring events by comparing the first loop with subsequent loops, the subsequent loops having the length of the first loop.

2. The method of claim 1, further comprising determining if the recorded signal is rhythmic.

3. The method of claim 1, wherein the step of establishing an anchor point in the recorded signal comprises utilizing digital signal processing techniques to identify where recurring events begin.

4. The method of claim 1, wherein the step of establishing an anchor point in the recorded signal comprises receiving an indication of a location on the recorded signal from a computer input device.

5. The method of claim 1, wherein the step of determining a length for the period of recurring events in the recorded signal comprises utilizing digital signal processing techniques.

6. The method of claim 5, wherein the digital signal processing techniques compare a first portion of the recorded signal with a second portion of the recorded signal, the first portion and the second portion having the same length.

7. The method of claim 1, wherein the step of determining a length for the period of recurring events in the recorded signal comprises receiving an

indication of a length of the period on the recorded signal from a computer input device.

8. The method of claim 1, wherein the step of refining the length for the period of recurring events by comparing the first loop with subsequent loops  
5 comprises utilizing digital signal processing techniques.

9. The method of claim 8, the digital signal processing techniques compare a first portion of the recorded signal with a second portion of the recorded signal, the first portion starting at a first inspection point in the recorded signal and ending at a first distance from the first inspection point equal to the length to be  
10 refined, the second portion starting at a second inspection point in the recorded signal and ending at a second distance from the second inspection point equal to the length to be refined.

10. The method of claim 1, wherein the step of refining the length for the period of recurring events comprises using the distance between multiple anchor  
15 points as a guide to estimate an approximate count of time periods from which a tempo can be derived.

11. In a computer program product, a system of providing a measurement of a tempo of a recorded signal, the tempo being a period of recurring events within the recorded signal, the system comprising:

20 means for establishing one or more anchor points in the recorded signal, the anchor point being indicative of a beginning point for a period of recurring events in the recorded signal;

means for determining a length for the period of recurring events in the recorded signal, the length starting from the established anchor point and  
25 defining a first loop; and

means for refining the length for the period of recurring events by comparing the first loop with subsequent loops, the subsequent loops having the length of the first loop.

12. The system of claim 11, further comprising means for adjusting the length for the period of recurring events.

13. The system of claim 11, wherein the means of establishing one or more anchor points in the recorded signal comprises means for identifying where  
5 recurring events begin.

14. The system of claim 11, wherein the means of establishing one or more anchor points in the recorded signal comprises means for receiving an indication of a location on the recorded signal from a computer input device.

15. The system of claim 11, wherein the means of refining the length for  
10 the period of recurring events by comparing the first loop with subsequent loops comprises means for comparing a first portion of the recorded signal with a second portion of the recorded signal, the first portion starting at a first inspection point in the recorded signal and ending at a first distance from the first inspection point equal to the length to be refined, the second portion starting at a second inspection  
15 point in the recorded signal and ending at a second distance from the second inspection point equal to the length to be refined.

16. The system of claim 11, further comprising means for combining recorded signals with unknown tempos.

17. The system of claim 11, further comprising means for presenting the  
20 recorded signal and loops in the recorded signal.

18. A processing system comprising:

a central processing unit (CPU); and

a storage device coupled to a processor and having stored there information for configuring the CPU to:

25 establish a loop starting point in a recorded signal, the loop starting point being indicative of a beginning point for a period of recurring events in the recorded signal, the period of recurring events defining a loop;

determine a length for the loop in the recorded signal, the length starting from the established loop starting point; and

- adjust the length for the loop by comparing the loop with subsequent loops, the subsequent loops being defined as portions of the recorded signal having the length of the loop and starting at a point in the recorded signal later in time.
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19. The system of claim 17, further comprising a presentation device, wherein the presentation device is configured to provide a graphical user interface which presents portions of the recorded signal.
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20. The system of claim 17, further comprising an interface device configured to connect the CPU with a network of computers.

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